## Asiphonaphis and Aphis Studies (Homoptera: Aphididae).

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The following report deals with three species of Asiphonaphis, two of which are here described as new,<sup>3</sup> and several

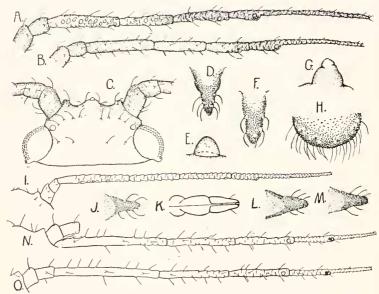


Fig. 1. Asiphonaphis pruni W. and D. Alate, A. C-D. Apterous, B, E-H; E, lateral, and G, prothoracic tubercle. A. utahensis n. sp. Alate, 1-J. A. carolinensis n. sp. Apterous, K-O.

species of Aphis whose distribution in the west is incompletely known.

Asiphonaphis pruni W. and D. Bountiful, June 1929 (H. J. Pack). Drawings are of specimens from Baraboo, Wisconsin, July 25, 1912 (A. C. Burrill).

Asiphonaphis utahensis n. sp.

Allate vivipara.—Size 1.41 to 1.71 mm. long to base of cauda, and 0.67 to 0.8 mm. wide across the abdomen; head and thorax black; antennae dusky to blackish, 1.03 to 1.24 mm. long; an-

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tennal III, 0.24 to 0.32 mm. long with 5 to 8 sensoria; IV, 0.17 to 0.22; V, 0.17 to 0.2; VI, 0.1 to 0.13  $\pm$  0.24 mm.; rostrum reaching second coxae; rostral IV  $\pm$  V 0.114, tip slenderly obtuse; hind tibiae 0.73; hind tarsi 0.11; first and seventh abdominal tubercles largest, remainder present; abdomen with dusky lateral patches which converge on first, sixth and seventh abdominal segments; small to larger, irregular dorsal dusky areas also occur; cauda black, 0.08 mm. long on median line, 0.11 total length.

Taxonomy.—Asiphonaphis utahensis differs from A. pruni W. and D. in having fewer than 10 sensoria on antennal III and none on antennal IV; hairs on antennae sparse and incon-

spicuous.

Collected upon Salsola pestifer at Thompsons, Utah, September 13, 1929 (W. A. Shands). Type in the U. S. National Museum.

Asiphonaphis carolinensis n. sp.

Apterous ovipara.—Size 1.71 to 1.74 mm. long and 0.88 to 0.94 wide across the abdomen; antennae dusky, 1.19 to 1.35 mm. long; antennal III, 0.34 to 0.41 mm. long; IV, 0.22 to 0.24; V, 0.21 to 0.23; VI, 0.13 to 0.146 + 0.2 mm.; rostrum reaching third coxae, tip slenderly obtuse; rostral IV + V, 0.1; legs slender and largely blackish; hind tibiae 0.91 to 0.98; hind tarsi 0.14 to 0.16; lateral tubercles conspicuous, rather slender, on abdominal segments 1 to 7; areas along margins of abdomen appear broken up, possibly glandular; cauda black.

Taxonomy.—Asiphonaphis carolinensis has unguis less than twice the length of base, instead of nearly three times base, and more slender lateral tubercles and fewer hairs near tubercles than in A. pruni W. and D. The pattern of dorsal and lateral dusky blotches, present in A. utahensis K. is lacking in A. car-

olinensis.

Collected on stem of (?) host, Florence, South Carolina, November 22, 1934 (C. F. Rainwater). *Type* in the U. S. National Museum.

Aphis canae Will. Buhl, Idaho, October 1930 (D. E. Fox). A. carbocolor Gill. Castleford, Idaho, September 12, 1932 (Fox).

A. CHRYSOTHAMNI Wilson. Abundant on young bark of Chrysothamnus nauscosus at Brigham, Utah, June 8, 1928;<sup>4</sup>

Malad, Idaho, June 1933.

<sup>4</sup> Unless otherwise indicated, collections are by the writer.

A. CHRYSOTHAMNICOLA G. and P. Feeding upon the brown, older twig bark of *Chrysothamnus nauscosus* at Amalga, Utah, September 1, 1926, the specimens being rather sluggish and not easily disturbed. Rostral IV + V is significantly longer than in *A. chrysothamni* Wil. Hollister, Idaho, October 30, 1930 (Fox). Eagele, Colorado, August 24, 1935.

A. ERIOGONI Cowen. Hollister, Idaho, October 1930 (Fox).

A. Fraserae G. and P. Burley, Idaho, October 1930 (Fox).

A. HERMISTONII Wilson. On Artemisia tridentata, Eden, Utah, July 27, 1925.

A. INCOGNITA H. and F. On *Symphoricarpos*, Cowley Canyon, Utah, May 31, 1934 (T. O. Thatcher).

A. LUGENTIS Will. Castleford and Blue Gulch, Idaho, September 12, 1932 (Fox).

A. LUPINI G. and P. On blue *Lupinus*, Florence, Montana, June 17, 1912 (H. F. Dietz).

A. Lutescens Monell. Hansen, Idaho, October 1930 (Fox).

A. MINUTISSEMA (G. and P.) On Artemisia tridentata, 20 miles west of Castleford, September 30, 1932, and Twin Falls, October 23, 1930, in Idaho (Fox).

A. MONARDE Oest. Twin Falls, Idaho, October 30, 1930 (Fox).

A. NEILLIAE Oest. Murtaugh and Wendell, Idaho, October 1930 (Fox).

A. OENOTHERAE Oest. Hansen, Idaho, October 30, 1930 (Fox).

A. OESTLUNDI Gill. Hansen, Idaho, October 30, 1930 (Fox).

A. OREGONENSIS Wilson. On *Artemisia tridentata* at Brigham, May 17, 1933; Snowville, June 1928 (V. M. Tanner), in Utah.

A. SALICETI Kalt. Buhl and Castleford, Idaho, October 1930 (Fox).

A. SENECIO-RADICIS (G. and P.). Hansen, Idaho, October (Fox).

A. SENSORIATA G. and B. Hollister, Idaho, October (Fox).

A. SOLIDAGINIFOLIAE Will. Berger and Castleford, Idaho, October (Fox).

A. Spiraecola Patch. Twin Falls, Idaho, October 1930 (Fox).